

REMARKS

This Amendment is in response to the Office Action of April 24, 2009. In the Office Action, claims 1-4, 7-13, 16-20 and 23-25 were rejected. The action was made Final. With this Amendment, claims 2, 12 and 19 are amended only to comply with requirements of form. Thus, entry of the claim amendments is respectfully requested. Claims 1-4, 7-13, 16-20 and 23-25 are presented for reconsideration and allowance.

Claim Rejections 35 USC 112

Claim 12 was rejected under 35 USC 112, second paragraph based on lack of antecedent basis for the phrases "the received first signal" and "the second control primitives". Antecedent basis for "the received first signal" is "a received first signal" at line 3 of amended claim 12. Claim 12 is amended to remove the reference to "the second control primitives". Withdrawal of the rejections of claim 12 and reconsideration and allowance of claim 12 are therefore requested.

Claim 19 was rejected under 35 USC 112, second paragraph based on lack of antecedent basis for the phrase "the received physical layer". With this Amendment, claim 19 is amended to remove the word "received" from this phrase. Withdrawal of the rejection of claim 19 and reconsideration and allowance of claim 19 are therefore requested.

Claim Rejections - 35 USC 103

Claims 1, 2, 4, 7-11, 13, 16-19, 21, 23-25 were rejected under 35 USC 103(a) over Ghaffari et al. U.S. Patent 6,829,663 in view of Lo et al. U.S. Patent Publication 2004/0010625.

In the prior Office Action that was mailed on September 19, 2008, claims 3, 5, 6, 12, 14, 15, 20 and 22 were indicated as allowable. In the Amendment filed on January 16, 2009, subject matter from one or more of the allowable claims was included in independent claims 1, 10 and 19. The final Office Action does not address the inclusion of the additional subject matter in the independent claims, but simply suggests that no substantial amendments have been made to the claims and goes on to include the above 35 USC 103(a) rejection, which is identical to the 35

USC 103(a) rejection that was included in the Office Action that was mailed on September 19, 2008.

Applicant respectfully submits that there is no evidence that the cited references disclose or suggest “control primitive data that includes an adjustable pre-emphasis,” “frequency rolloff,” etc., which were included in claims that were indicated as allowable and are now in the independent claims. Further, there is nothing about “frequency rolloff” in the entire Office Action. Thus, it can only reasonably be concluded that the Office’s rationale for the rejection comes from facts existing only in the personal knowledge of an employee of the Office. Hence, an evidentiary affidavit is necessary and proper under 37 CFR 1.104(d)(2) in order for the Applicant to properly reply to the basis of the rejection in the record. Therefore, Applicant respectfully requests that such an affidavit be provided by the Examiner.

Neither Ghaffari et al. nor Lo et al., taken singly or in combination, teach or suggest a first line driver coupled to transmit control primitive data that includes an adjustable pre-emphasis and that has a response to the first physical layer quality data as presently claimed in amended claim 1.

Ghaffari discloses primitives and primitive encoder 216 and primitive decoder 212 in a link layer in FIG. 2 and at column 6, lines 10-14. Ghaffari, however, does not teach or suggest primitives that include “control primitive data” as presently claimed in claim 1. Primitives in Ghaffari are simply commands or indications of events that do not comprise primitive control data. Further, Ghaffari teaches or suggests nothing about an adjustable pre-emphasis. Lo does not make up for the deficiencies of Ghaffari.

As indicated above, “frequency rolloff,” which is included in independent claims 10 and 19, is not even mentioned in the Office Action. Claim 10 includes “control primitive data that includes an indication of frequency rolloff,” which is a feature that is neither taught nor suggested in Ghaffari and Lo, taken singly or in combination. Claim 19 includes “a quality sensing circuit that makes a comparison of a quality standard to a physical layer quality that includes an amplitude and a frequency rolloff, and that generates control primitives

representative of the comparison.” This feature is not taught or suggested by Ghaffari or Lo, taken singly or in combination.

Independent claims 1, 10 and 19 are thus non-obvious and patentable. Withdrawal of the rejections of claims 1, 10 and 19, and reconsideration and allowance of claims 1, 10 and 19 are therefore requested. Dependent claims 2-4, 7-9, 11-13, 16-18, 20 and 23-25 include additional limitations that, when taken in combination with their respective base independent claims 1, 10 or 19, are also non-obvious and patentable. Withdrawal of the rejections of dependent claims 2-4, 7-9, 11-13, 16-18, 20 and 23-25, and reconsideration and allowance of claims 2-4, 7-9, 11-13, 16-18, 20 and 23-25 are therefore requested.

CONCLUSION

The other art made of record by the Examiner (Chan '734, Chan '865, Betts '519, Barkaro '873 and Wang '705) has been considered, and the claims are considered patentable over these references as well. The Application appears to be in condition for allowance of claims 1-4, 7-13, 16-20 and 23-25. The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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